(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 15 July 2004 (15.07.2004)

PCT

(10) International Publication Number WO 2004/058058 A1

- (51) International Patent Classification⁷: A61B 5/00, G01N 21/65, A61B 5/145, G02B 21/00, G01J 3/44
- (21) International Application Number:

PCT/IB2003/005732

- (22) International Filing Date: 4 December 2003 (04.12.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

02080575.0

30 December 2002 (30.12.2002) El

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];

Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LUCASSEN, Gerhardus, W. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). PUPPELS, Gerwin, J. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). VAN DER VOORT, Marjolein [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

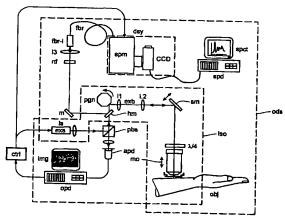
- (74) Agent: COHEN, Julius, S.; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANALYSIS APPARATUS AND METHOD



(57) Abstracts-The present invention relates to an analysis apparatus, in particular a spectroscopic analysis apparatus, for analysing an object, such as the blood of a patient, and a corresponding analysis method. An excitation system (exs) emits an excitation beam (exb) to excite a target region and a beam separation unit (hm) separates at least part of elastically scattered radiation from inelastically scattered radiation, said scattered radiation being generated by the excitation beam (exb) at the target region. A monitoring system (lso) generates an image of the target region using the elastically scattered or the inelastically scattered radiation and defines a region of interest in said image. To increase efficiency of the recording of Raman spectra, a control unit (ctrl) is provided for controlling the excitation system (exs) such that the defined region of interest of the target region is excited and/or for controlling the detection system (dsy) such that only signals from the defined region of interest are detected, and a detection system (dsy) is provided for detecting scattered radiation from the defined region of interest generated by the excitation beam. Preferably the signal from the defined region of interest is averaged by distributing the laser excitation power over the defined region of interest area.

